Yet a ſimilar ſituation may be croſſed, and the height gained, in one movement, as appears by calculation, for about 8,000l.; conſequently 19,000l. is ſaved, which is almoſt the whole expence of the aqueduct.

Without entering into tedious eſtimates to prove this, I conceive the common ſenſe of thoſe who have the leaſt knowledge of the ſubject, will inform them of the reaſon of theſe ſavings; but to the ſpeculating reader, if he obſerves by the plate that the part croſſing the river is a ſimple ſtage, the weight of which, compared with the load of water and ſtone which preſs on the piers of an aqueduct, is trifling; conſequently the piers are but as columns without arches, and the maſonry, which in aqueducts is almoſt the whole expence, is here ſo contracted as to be, comparatively, ſcarce worth mentioning; iron arches or braces being adopted, the expence of which is not more than the centres to build an arch of ſtone, and the continued plane performing the part of locks, of which he has had a comparative view, I conceive it will exhibit the obvious reaſon of ſuch important ſavings.

This combination is indeed ſo material, that, in projecting a line of canal where a river or deep valley is to be croſſed, it ſhould be well conſidered, whether it can conveniently be brought to ſuch a ſituation that the ground will admit of riſing at the time of croſſing; which, even on the ſmall ſyſtem, will ſave time and expence.

CHAP.

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